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Correction

The Monomeric dUTPase from Epstein-Barr Virus Mimics Trimeric dUTPases

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The structure of *Methanococcus jannaschii* dUTPase was first determined by Johansson et al. (2003). It is a bifunctional dCTP deaminase-dUTPase and not a pure dUTPase.

We stated incorrectly in the introduction that β-herpesviruses, in particular human cytomegalovirus, code for dUTPases. In β-herpesviruses, the gene located at the position of the dUTPase does not code for a protein with dUTPase activity (Caposio et al., 2004), although it is structurally related to dUTPases (Davison and Stow, 2005; McGeehan et al., 2001). Mutant HCMV virus deleted for this gene has a moderate growth defect (Dunn et al., 2003).

We omitted a reference to the work of Sommer et al. (1996), who demonstrated the dUTPase activity of BLLF3 and determined a K_m = 0.8 μM for EBV dUTPase. Previously, a dUTPase activity had been shown for EBV (Williams et al., 1985) and the role of BLLF3 had been inferred from sequence homology with the HSV-1 UL50, for which dUTPase activity had been demonstrated (Williams, 1988). The EBV dUTPase has been first detected in nasopharyngeal carcinoma by Nicholls et al. (1998).

The INDONESIA program used for Figure 1C has been written by D. Madsen, P. Johansson, and G. J. Kleywegt (unpublished work).

References

Johansson, E., Bjornberg, O., Nyman, P.O., and Larsen, S. (2003). Structure of the bifunctional dCTP deaminase-dUTPase from Methanocaldococcus jannaschii and its relation to other homotrimeric dUTPases. J. Biol. Chem. *278*, 27916–27922.

Caposio, P., Riera, L., Hahn, G., Landolfo, S., and Gribaudo, G. (2004). Evidence that the Human Cytomegalovirus 46-kDa UL72 protein is not an active dUTPase but a late protein dispensable for replication in fibroblasts. Virology *325*, 264–276.

Davison, A.J., and Stow, N.D. (2005). New genes from old: redeployment of dUTPase by herpesviruses. J. Virol. *79*, 12880–12892.

McGeehan, J.E., Depledge, N.W., and McGeoch, D.J. (2001). Evolution of the dUTPase gene of mammalian and avian herpesviruses. Curr. Protein Pept. Sci. *2*, 325–333.

Dunn, W., Chou, C., Li, H., Hai, R., Patterson, D., Stolc, V., Zhu, H., and Liu, F. (2003). Functional profiling of a human cytomegalovirus genome. Proc. Natl. Acad. Sci. USA *100*, 14223–14228.

Sommer, P., Kremmer, E., Bier, S., Konig, S., Zalud, P., Zeppezauer, M., Jones, J.F., Mueller-Lantzsch, N., and Grasser, F.A. (1996). Cloning and expression of the Epstein-Barr virus-encoded dUTPase: patients with acute, reactivated or chronic virus infection develop antibodies against the enzyme. J. Gen. Virol. *77*, 2795–2805.

Williams, M.V., Holliday, J., and Glaser, R. (1985). Induction of a deoxyuridine triphosphate nucleotidohydrolase activity in Epstein-Barr virus-infected cells. Virology *142*, 326–333.

Williams, M.V. (1988). Herpes simplex virus-induced dUTPase: target site for antiviral chemotherapy. Virology *166*, 262–264.

Nicholls, J.M., Sommer, P., Kremmer, E., Ong, K.S., Fung, K., Lee, J.M., Ng, M.H., and Grasser, F.A. (1998). A new lytic antibody, 7D6, detects Epstein-Barr virus dUTPase in nonkeratinizing undifferentiated nasopharyngeal carcinomas. Lab. Invest. *78*, 1031–1032.

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